

AMENDMENTS TO THE CLAIMS

Please replace the words "Patent Claims" on page 8, line 1 with the following:

CLAIMS

We claim:

1. (Currently amended) Device for carrying out chemical reactions and processes in high-frequency fields, comprising:

a high-frequency chamber ~~which can be irradiated~~ for irradiating with at least one radiation source[([,]); and in which

a reactor with a closable cover, the reactor for exposing to a ~~can be exposed to the action of the high-frequency field, the reactor being able to be closed by a cover,~~ the reactor being ~~fixed on or in~~ connectively coupled to an the upper wall of the high-frequency chamber through a separable positive and nonpositive engagement connection, the reactor for containing a ~~and contains~~ the solid, liquid and/or gaseous substance or substance mixtures to be investigated or to be treated[([,])] in a pressure-resistant surroundings, wherein ~~rod-like~~ rod elements are provided around the reactor, and configured to form a pressure-resistant cage, which ~~can be connected~~ are constructed to fasten to the upper wall of the high-frequency chamber in a positive ~~and nonpositive~~ manner of engagement to secure them ~~either individually~~ through one or more fixing elements, wherein ~~and each of which~~ the rod elements has a guide for holding a crown-shaped holder ~~for the reactor or a reactor closure~~ where the holder is constructed to be fixed in its position ~~by in the manufacture of the separable positive and nonpositive engagement connection~~ fixing of the ~~rod-like~~ rod elements.

2. (Currently amended) Device according to Claim 1, wherein the ~~rod-like~~ rod elements are cylindrical, ~~and have as a~~ wherein the guide comprises a narrowing of the diameter which does not reach to the end of the ~~rod-like~~ rod element and that the holder preferably has u-shaped grooves which correspond in their position with each of the guides of the ~~rod-like~~ rod elements.

3. (Currently amended) Device according to Claim 1, wherein the one or more fixing elements each ~~consist of~~ comprise a fixing adapter with a threaded bore on ~~the~~ a face, with which the ~~rod-like~~ rod elements can be secured as well as separated with the aid of screw connections on bores in the upper wall and on the cover of the high-frequency chamber.

4. (Currently amended) Device according to Claim 1, wherein the one or more fixing elements ~~consist of~~ comprise a threaded bore on ~~the~~ a face, provided directly in the rod-like elements, through which the rod-like elements can be secured on or separated from bores with the aid of screw connections in the upper wall and in the cover of the high-frequency chamber.

5. (Currently amended) Device according to Claim 3, wherein the cover of the reactor has screw connections corresponding with the position of the bores of the upper wall of the high-frequency chamber as well as with the threaded bores of the ~~rod-like~~ rod elements or their fixing adapter, wherein, when the cover is secured to the upper wall of the high-frequency chamber and the crown-shaped holder is correspondingly fixed in position by the guides of the rod elements, whereby, with the securing of the cover on the upper wall of the high-frequency chamber at the same time the rod-like elements are secured and fixed in their position to clamp the crown-shaped holder, and the high-frequency chamber is closed so that it is tight to microwaves.

6. (Currently amended) Device according to Claim 1, wherein the reactor has an upper reactor closure, which is connected to the cover and, together with this, can be separated from the reactor.
7. ((Currently amended)) Device according to Claim 1, wherein the reactor has a lower reactor closure, which can be separated from the reactor and is provided for holding the crown-shaped holder.
8. (Original) Device according to Claim 7, wherein the crown-shaped holder and/or the lower reactor closure have guide elements for the purpose of fixing the position of the reactor.
9. (Currently amended) Device according to Claim 1, wherein stop elements are provided which facilitate the positive and nonpositive engagement of the ~~rod-like~~ rod elements on the upper wall of the high-frequency chamber, ~~especially~~ wherein the stop elements facilitate for the purpose of rapid and low-cost mounting or changing of the configuration of the device.
10. (canceled)
11. ((Currently amended)) Device according to Claim 1, wherein ~~[[it]]~~ the device is built as a single reactor system.
12. (Currently amended) Device according to Claim 1, wherein, as a multiple reactor system, ~~[[it]]~~ the device is provided with multiple reaction chambers, each of the multiple reaction chambers for holding an insert~~[[s]]~~.
13. (Currently amended) Device according to Claim 1, wherein the reactor or ~~the~~ a set of multiple reaction chambers are designed as a batch reactor system.

14. (Currently amended) Device according to Claim 1, wherein the reactor or ~~the~~ a set of multiple reaction chambers are designed as a flow-through reactor system.

15. (Currently amended) Device according to Claim 3, wherein the fixing elements further comprise an annular flange through which the ~~rod-like~~ rod elements are secured.

16. (Currently amended) Device according to Claim 4, wherein the fixing elements further comprise an annular flange through which the ~~rod-like~~ rod elements are secured.

17. (Currently amended) Device according to Claim 4, wherein the fixing elements further comprise an annular flange through which the ~~rod-like~~ rod elements are secured.

18. (Original) Device according to Claim 8, wherein the guide elements comprise a cylinder groove and a cylinder flange engaging the cylinder groove.

19. (Original) Device according to Claim 9, wherein the stop elements comprise an annular flange.

20. (New) Device according to Claim 19, wherein the annular flange is designed at the same time as a guide element for the cover and the upper reactor closure.